

REMARKS

The Office Action mailed December 16, 2010 has been carefully considered. Applicants have amended Claims 1, 5, 7, 10, 13, 15 and 25-26. No new matter has been added. Reconsideration in view of the following remarks is respectfully requested.

Claim Objections

The Examiner objected to claims 25 and 26 because the claims read “the maximum dimension if less than.” Applicants have amended claims 25 and 26 to read “the maximum dimension is less than.” Applicants accordingly request withdrawal of the claim objections.

Rejections under 35 U.S.C. § 112

The Examiner rejected to claims 5 and 13 under 35 U.S.C. § 112, second paragraph, as being indefinite because “the inlet” lacks antecedent basis. Applicants have amended claims 5 and 13 to provide antecedent basis. Applicants accordingly request withdrawal of the rejections under 35 U.S.C. § 112.

Rejections under 35 U.S.C. §§ 102 and 103

Claims 1, 2, 4-8, 10, 12-16, 26 and 26 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,855,801 to Lin et al. (hereinafter “Lin”). Claims 3 and 11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Lin, and claims 9 and 17 stand rejected as being unpatentable over Lin in view of U.S. Patent Publication No. 2003/0161572 to Johnck et al. (hereinafter “Johnck”). These rejections are traversed.

Independent claims 1 and 10 have been amended to clarify that the input of the at least main channel is located on an end face of the device. In other words, an electrical and/or fluidic connection is made on the end face. As a result, the implantation of the electrical and/or fluidic

connection can be made advantageously on the body of the micro-device according to the invention in its extension – without protruding the cross-section of the body.

This provides several advantages. In particular, the claimed invention does not cause damage to tissues encountering during implantation in direct contrast with the prior art micro-devices, such as, in particular, the addressable micro-injectors described at page 1, line 20 – page 2, line 2 of the present application.

Lin fails to disclose these limitations. Lin describes a micro needle made by a semiconductor wafer SOI technology which can be assimilated to the micro injector discussed in the prior art section of the present application.

The micro needle 10 of Lin includes a needle body 14 that is thin and elongated. The thin end 86 is for insertion into a target tissue, such as a blood vessel 102 or 112 according to nerve cells in the embodiments shown in Figures 6 and 7 of Lin. This can be used with electrodes 84 for stimulation or recording. The micro needle 10 also includes an extended area 11 (“interface zone 11”). This extended area 11 is in the continuity of the needle body 14, which is used for electrical connections 24, 104, 106 or fluid connections 22, 114. In particular, the extended area is used with the installation of heating elements 36, 60 to form a bubble-type electrically powered micro pump. See, for example, Figures 4A and 4B and the corresponding description in col. 8.

In Lin, the dimensions of this interface area 11 are identified as an area between 2 and 3 mm². See col. 4, lines 10-12. In addition, in the embodiments shown in Figures 6 and 7, the interface area 11 is not implanted. Lin, therefore, does not disclose or suggest an implantable micro-device with fluidic and electrical connections in the face of the body, as required by independent claims 1 and 10.

Johnck also fails to disclose these limitations. Johnck merely describes the detection of a capillary electrophoresis system with laser fluorescence. The Johnck device is not a micro-

diagnosis or therapy device that is implantable. Furthermore, one skilled in the art would not combine the Johnck device, which is not implantable, with Lin to arrive at the presently claimed device which is implantable.

Thus, the cited art fails to teach or suggest all of the limitations of independent claims 1 and 10. Claims 2-9, 11-17 and 25-26 depend, directly or indirectly, on one of the foregoing independent claims. Applicants accordingly request withdrawal of the rejections under 35 U.S.C. §§ 102 and 103.

Conclusion

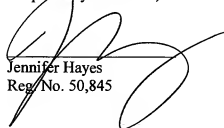
It is believed that this reply places the above-identified patent application into condition for allowance. Early favorable consideration of this reply is earnestly solicited.

If, in the opinion of the Examiner, an interview would expedite the prosecution of this application, the Examiner is invited to call the undersigned attorney at the number indicated below.

Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Please charge any additional required fee or credit any overpayment not otherwise paid or credited to our deposit account No. 50-3557.

Respectfully submitted,



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